

This listing of claims will replace all prior versions, and listings, of claims in the application:

**Listing of Claims:** Please amend the claims as follows

**We claim:**

**Claim 1. (Currently Allowed)** An isolated polypeptide polypeptide comprising the amino acid sequence of SEQ ID NO: 2

**Claims 2.-50. (Cancelled)**

**Claim 51. (Currently Allowed)** The polypeptide of claim 1, which is an oxidase and is capable of producing H<sub>2</sub>O<sub>2</sub>.

**Claim 52. (Currently Allowed)** The polypeptide of claim 1, which is an alpha amino acid oxidase.

**Claim 53. (Currently Allowed)** The polypeptide of claim 52, which is a L-lysine and/or L-arginine oxidase.

**Claim 54. (Currently Allowed)** The polypeptide of claim 51 which generates H<sub>2</sub>O<sub>2</sub> in the presence of an L-amino acid.

**Claim 55. (Currently Allowed)** The polypeptide of claim 54, wherein the L-amino acid is L-lysine, L-arginine, or a mixture thereof.

**Claim 56. (Currently Allowed)** The polypeptide of claim 1, which is a recombinant polypeptide.

**Claim 57. (Currently Allowed)** The polypeptide of claim 56, which is a fusion polypeptide.

**Claim 58. (Cancelled)**

**Claim 59. (Cancelled)**

**Claim 60. (Cancelled)**

**Claim 61. (Cancelled)**

**Claim 62. (Cancelled)**

**Claim 63. (Cancelled)**

**Claim 64. (Currently Allowed)** A composition or a kit comprising the polypeptide of claim 1 in a pharmaceutically effective amount and a diluent, a carrier and/or an adjuvant.

**Claim 65. (Currently Allowed)** The composition or the kit of claim 64, comprising at least one L-amino acid which is capable of increasing the cytotoxic activity of said polypeptide.

**Claim 66. (Cancelled)**

**Claim 67. (Currently Allowed)** The composition or the kit of claim 65, wherein the polypeptide is administered before the modulating substance.

**Claim 68. (Currently Allowed)** The composition or the kit of claim 65, wherein the L-amino acid is L-lysine, L-arginine, or a mixture thereof.

**Claims 69–104. (Cancelled)**

**Claim 105. (Currently Amended)** The polypeptide of claim 1 106 which has sequence identity of at least 95% to the polypeptide sequence of SEQ ID NO: 2 and which is encoded by a polynucleotide which specifically hybridizes to the full complement of SEQ ID NO: 1 under stringent hybridization conditions comprising washing for 1 h with 1x SSC and 0.1% SDS at 68°C 55°C; wherein said polypeptide is a L-lysine and/or L-arginine oxidase having the capability to produce H<sub>2</sub>O<sub>2</sub>.

**Claim 106. (Currently Allowed)** An isolated polypeptide which is a polypeptide which has sequence identity of at least 90% to the polypeptide sequence of SEQ ID NO: 2 and which is encoded by a polynucleotide which specifically hybridizes to the full

complement of SEQ ID NO: 1 under stringent hybridization conditions comprising washing for 1 h with 1x SSC and 0.1% SDS at 68°C; and which is a L-lysine and/or L-arginine oxidase having the capability to produce H<sub>2</sub>O<sub>2</sub>.

**Claim 107. (New)** The polypeptide of claim 106 which generates H<sub>2</sub>O<sub>2</sub> in the presence of an L-amino acid.

**Claim 108. (New)** The polypeptide of claim 107, wherein the L-amino acid is L-lysine, L-arginine, or a mixture thereof.

**Claim 109. (New)** The polypeptide of claim 106, which is a recombinant polypeptide.

**Claim 110. (New)** The polypeptide of claim 106, which is a fusion polypeptide.

**Claim 111. (New)** A composition or a kit comprising the polypeptide of claim 106 in a pharmaceutically effective amount and a diluent, a carrier and/or an adjuvant.

**Claim 112. (New)** The composition or the kit of claim 109, comprising at least one L-amino acid which is capable of increasing the cytotoxic activity of said polypeptide.

**Claim 113. (New)** The composition or the kit of claim 110, wherein the polypeptide is administered before the modulating substance.

**Claim 114. (New)** The composition or the kit of claim 110, wherein the L-amino acid is L-lysine, L-arginine, or a mixture thereof.